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Kasar et al.

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(54) **INDUCTIVE CHARGING BETWEEN ELECTRONIC DEVICES**

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CPC ***H02J 7/025*** (2013.01); ***H01F 38/14*** (2013.01); ***H02J 5/005*** (2013.01); ***H02J 7/0042*** (2013.01);
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(57) **ABSTRACT**

An electronic device and methods for inductively charging an electronic device using another external electronic device. The electronic device may include an enclosure, a battery positioned within the enclosure, and an inductive coil coupled to the battery. The inductive coil may have two or more operational modes, including a power receiving operational mode for wirelessly receiving power and a power transmitting operational mode for wirelessly transmitting power. The electronic device may also have a controller coupled to the inductive coil for selecting one of the operational modes.

20 Claims, 37 Drawing Sheets